Contents

Abramov I, → Mackintosh RM, et al. 85
Arikawa K, Kawamata K, Suzuki T, Eguchi E: Daily changes of structure, function and rhodopsin content in the compound eye of the crab *Hemigrapsus sanguineus* 161
Arkett SA: Ciliary arrest controlled by identified central neurons in a urochordate (Ascidiacea) 837
Atkins G, Pollack GS: Response properties of prothoracic, interganglionic, sound-activated interneurons in the cricket *Teleogryllus oceanicus* 681
Atwood HL, → Pahapill PA, et al. 367
Bartness TJ, → Elliott JA, et al. 245
Bastian J: Electrolocation in the presence of jamming signals: behavior 811
Bastian J: Electrolocation in the presence of jamming signals: electroreceptor physiology 825
Bauer M, Helversen O von: Separate localization of sound recognizing and sound producing neural mechanisms in a grasshopper 95
Bigalke-Kunz B, Rübsamen R, Dörrscheidt GJ: Tonotopic organization and functional characterization of the auditory thalamus in a songbird, the European starling 255
Bilotta J, → Mackintosh RM, et al. 85
Blagburn JM, Sattelle DB: Nicotinic acetylcholine receptors on a cholinergic nerve terminal in the cockroach, *Periplaneta americana* 215
Bleckmann H, Bullock TH, Jørgensen JM: The lateral line mechanoreceptive mesencephalic, diencephalic, and telencephalic regions in the thornback ray, *Platyrhinoidis triseriata* (Elasmobranchii) 67
Block GD, → McMahon DG 335, 347
Boeckh J, Ernst K-D: Contribution of single unit analysis in insects to an understanding of olfactory function 549
Brady J: Circadian rhythms–endogenous or exogenous? 711
Bullock TH, → Bleckmann H, et al. 67
Buxbaum J, → Dudai Y, et al. 739
Capranica RR, → Mudry KM 407
Capranica RR, → Wilczynski W, et al. 659
Carlin NF, → Hölldobler B 567
Cheng K, Collett TS, Pickhard A, Wehner R: The use of visual landmarks by honeybees: bees weight landmarks according to their distance from the goal 469
Christensen TA, → Waldrop B, et al. 23
Collett TS, → Cheng K, et al. 469
Corbière-Tichané G, → Loftus R 399
Corfas G, → Dudai Y, et al. 739
Dörrscheidt GJ, → Bigalke-Kunz B, et al. 255
Drewes CD, → Zoran MJ 729
Dudai Y, Buxbaum J, Corfas G, Ofarim M: Formamidines interact with *Drosophila* octopamine receptors, alter the flies' behavior and reduce their learning ability 739
Dye J: Dynamics and stimulus-dependence of pacemaker control during behavioral modulations in the weakly electric fish, *Apteronotus* 175
Dye J, Heiligenberg W: Intracellular recording in the medullary pacemaker nucleus of the weakly electric fish, *Apteronotus*, during modulatory behaviors 187
Egelhaaf M: Dynamic properties of two control systems underlying visually guided turning in house-flies 777
Eguchi E, → Arikawa K, et al. 161
Eisner T, → Peschke K 377
Elliott JA, Bartness TJ, Goldman BD: Role of short photoperiod and cold exposure in regulating daily torpor in Djungarian hamsters 245
Elson RC: Flight motor neurone reflexes driven by strain-sensitive wing mechanoreceptors in the locust 747
Elson RC: Interneuronal processing of inputs from the campaniform sensilla of the locust hindwing 761
Ernst K-D, → Boeckh J 549
Ewert J-P, → Tsai HJ 295
Follett BK, → Konishi H, et al. 315
Foster RG, → Konishi H, et al. 315
French AS: Removal of rapid sensory adaptation from an insect mechanoreceptor neuron by oxidizing agents which affect sodium channel inactivation 275
FriesenWO, → Nusbaum MP, et al. 355
Gaunt AS, Gaunt SLL, Prange HD, Wasser JS: The effects of tracheal coiling on the vocalizations of cranes (Aves; Gruidae) 43
Gaunt SLL, → Gaunt AS, et al. 43
Gewecke M, → Heinzel H-G 671
Glantz RM, → Wang-Bennett LT 131, 147
Gnatzy W, → Grünert U 329
Goldman BD, → Elliott JA, et al. 245
Gooler DM, O'Neill WE: Topographic representation of vocal frequency demonstrated by microstimulation of anterior cingulate cortex in the echolocating bat, *Pteronotus parnelli parnelli* 283
Grünert U, Gnatzy W: K^+ and Ca^{++} in the receptor lymph of arthropod cuticular mechanoreceptors 329
Hamdorf K, → Schlecht P, et al. 227
Hardie RC: Is histamine a neurotransmitter in insect photoreceptors? 201
Hateren JH van: Neural superposition and oscillations in the eye of the blowfly 849
Heiligenberg W: Central processing of sensory information in electric fish 621
Heiligenberg W, → Dye J 187
Heinzel H-G, Gewecke M: Aerodynamic and mechanical properties of the antennae as air-current sense organs in *Locusta migratoria*. II. Dynamic characteristics 671
Helversen O von, → Bauer M 95
Hildebrand JG, → Waldrop B, et al. 23
Höglund G, → Schlecht P, et al. 227
Hölldobler B, Carlin NF: Anonymity and specificity in the chemical communication signals of social insects 567
Huber F: Plasticity in the auditory system of crickets: phonotaxis with one ear and neuronal reorganization within the auditory pathway 583
Illnerová H, Vaněček J: Entrainment of the circadian rhythm in the rat pineal N-acetyltransferase activity by prolonged periods of light 495
Jaggi K, → Tobler I 449
Jørgensen JM, → Bleckmann H, et al. 67
Juse A, → Schlecht P, et al. 227
Kafka WA: Similarity of reaction spectra and odor discrimination: single receptor cell recordings in *Antheraea polyphemus* (Saturniidae) 867
Kalko E, → Schnitzler H-U, et al. 267
Kawamata K, → Arikawa K, et al. 161
Kirchner WH, → Michelsen A, et al. 633
Kolb G, → Scherer C 891
Konishi H, Foster RG, Follett BK: Evidence for a daily rhythmicity in the acute release of luteinizing hormone in response to electrical stimulation in the Japanese quail 315
Korall H, Martin H: Responses of bristle field sensilla in *Apis mellifica* to geomagnetic and astrophysical fields 1
Kotak VC, Page CH: Synaptic responses produced in lobster abdominal postural motor neurons by mechanical stimulation of the swimmeret 695
Kristan WB Jr, → Nusbaum MP, et al. 355
Kryger P, → Michelsen A, et al. 633
Kutsch W, → Stevenson PA 115
Labhart T, → Nilsson D-E, et al. 645
Lehmann A, → Zeise M 461
Lnenicka GA, → Pahapill PA, et al. 367
Loftus R, Corbière-Tichané G: Response of antennal cold receptors of the catopid beetles, *Speophyes lucidulus* Delar. and *Choleva angustata* Fab. to very slowly changing temperature 399
Mackintosh RM, Bilotta J, Abramov I: Contributions of short-wavelength cones to goldfish ganglion cells 85
Martin H, → Korall H 1
McMahon DG, Block GD: The *Bulla* ocular circadian pacemaker. I. Pacemaker neuron membrane potential controls phase through a calcium-dependent mechanism 335
McMahon DG, Block GD: The *Bulla* ocular circadian pacemaker. II. Chronic changes in membrane potential lengthen free running period 347
Meyer E, → Nilsson D-E, et al. 645
Meyertholen EP, Stein PJ, Williams MA, Ostroy SE: Studies of the *Drosophila norpA* phototransduction mutant. II. Photoreceptor degeneration and rhodopsin maintenance 793
Michelsen A, Towne WF, Kirchner WH, Kryger P: The acoustic near field of a dancing honeybee 633
Miller L, → Schnitzler H-U, et al. 267
Mills A, Zakon HH: Coordination of EOD

Contents

Abramov I, → Mackintosh RM, et al. 85
Arikawa K, Kawamata K, Suzuki T, Eguchi E: Daily changes of structure, function and rhodopsin content in the compound eye of the crab *Hemigrapsus sanguineus* 161
Arkett SA: Ciliary arrest controlled by identified central neurons in a urochordate (Ascidiacea) 837
Atkins G, Pollack GS: Response properties of prothoracic, interganglionic, sound-activated interneurons in the cricket *Teleogryllus oceanicus* 681
Atwood HL, → Pahapill PA, et al. 367
Bartness TJ, → Elliott JA, et al. 245
Bastian J: Electrolocation in the presence of jamming signals: behavior 811
Bastian J: Electrolocation in the presence of jamming signals: electroreceptor physiology 825
Bauer M, Helversen O von: Separate localization of sound recognizing and sound producing neural mechanisms in a grasshopper 95
Bigalke-Kunz B, Rübsamen R, Dörrscheidt GJ: Tonotopic organization and functional characterization of the auditory thalamus in a songbird, the European starling 255
Bilotta J, → Mackintosh RM, et al. 85
Blagburn JM, Sattelle DB: Nicotinic acetylcholine receptors on a cholinergic nerve terminal in the cockroach, *Periplaneta americana* 215
Bleckmann H, Bullock TH, Jørgensen JM: The lateral line mechanoreceptive mesencephalic, diencephalic, and telencephalic regions in the thornback ray, *Platyrhinoidis triseriata* (Elasmobranchii) 67
Block GD, → McMahon DG 335, 347
Boeckh J, Ernst K-D: Contribution of single unit analysis in insects to an understanding of olfactory function 549
Brady J: Circadian rhythms–endogenous or exogenous? 711
Bullock TH, → Bleckmann H, et al. 67
Buxbaum J, → Dudai Y, et al. 739
Capranica RR, → Mudry KM 407
Capranica RR, → Wilczynski W, et al. 659
Carlin NF, → Hölldobler B 567
Cheng K, Collett TS, Pickhard A, Wehner R: The use of visual landmarks by honeybees: bees weight landmarks according to their distance from the goal 469
Christensen TA, → Waldrop B, et al. 23
Collett TS, → Cheng K, et al. 469
Corbière-Tichané G, → Loftus R 399
Corfas G, → Dudai Y, et al. 739
Dörrscheidt GJ, → Bigalke-Kunz B, et al. 255
Drewes CD, → Zoran MJ 729
Dudai Y, Buxbaum J, Corfas G, Ofarim M: Formamidines interact with *Drosophila* octopamine receptors, alter the flies' behavior and reduce their learning ability 739
Dye J: Dynamics and stimulus-dependence of pacemaker control during behavioral modulations in the weakly electric fish, *Apteronotus* 175
Dye J, Heiligenberg W: Intracellular recording in the medullary pacemaker nucleus of the weakly electric fish, *Apteronotus*, during modulatory behaviors 187
Egelhaaf M: Dynamic properties of two control systems underlying visually guided turning in house-flies 777
Eguchi E, → Arikawa K, et al. 161
Eisner T, → Peschke K 377
Elliott JA, Bartness TJ, Goldman BD: Role of short photoperiod and cold exposure in regulating daily torpor in Djungarian hamsters 245
Elson RC: Flight motor neurone reflexes driven by strain-sensitive wing mechanoreceptors in the locust 747
Elson RC: Interneuronal processing of inputs from the campaniform sensilla of the locust hindwing 761
Ernst K-D, → Boeckh J 549
Ewert J-P, → Tsai HJ 295
Follett BK, → Konishi H, et al. 315
Foster RG, → Konishi H, et al. 315
French AS: Removal of rapid sensory adaptation from an insect mechanoreceptor neuron by oxidizing agents which affect sodium channel inactivation 275
FriesenWO, → Nusbaum MP, et al. 355
Gaunt AS, Gaunt SLL, Prange HD, Wasser JS: The effects of tracheal coiling on the vocalizations of cranes (Aves; Gruidae) 43
Gaunt SLL, → Gaunt AS, et al. 43
Gewecke M, → Heinzel H-G 671
Glantz RM, → Wang-Bennett LT 131, 147
Gnatzy W, → Grünert U 329
Goldman BD, → Elliott JA, et al. 245
Gooler DM, O'Neill WE: Topographic representation of vocal frequency demonstrated by microstimulation of anterior cingulate cortex in the echolocating bat, *Pteronotus parnelli parnelli* 283
Grünert U, Gnatzy W: K^+ and Ca^{++} in the receptor lymph of arthropod cuticular mechanoreceptors 329
Hamdorf K, → Schlecht P, et al. 227
Hardie RC: Is histamine a neurotransmitter in insect photoreceptors? 201
Hateren JH van: Neural superposition and oscillations in the eye of the blowfly 849
Heiligenberg W: Central processing of sensory information in electric fish 621
Heiligenberg W, → Dye J 187
Heinzel H-G, Gewecke M: Aerodynamic and mechanical properties of the antennae as air-current sense organs in *Locusta migratoria*. II. Dynamic characteristics 671
Helversen O von, → Bauer M 95
Hildebrand JG, → Waldrop B, et al. 23
Höglund G, → Schlecht P, et al. 227
Hölldobler B, Carlin NF: Anonymity and specificity in the chemical communication signals of social insects 567
Huber F: Plasticity in the auditory system of crickets: phonotaxis with one ear and neuronal reorganization within the auditory pathway 583
Illnerová H, Vaněček J: Entrainment of the circadian rhythm in the rat pineal N-acetyltransferase activity by prolonged periods of light 495
Jaggi K, → Tobler I 449
Jørgensen JM, → Bleckmann H, et al. 67
Juse A, → Schlecht P, et al. 227
Kafka WA: Similarity of reaction spectra and odor discrimination: single receptor cell recordings in *Antheraea polyphemus* (Saturniidae) 867
Kalko E, → Schnitzler H-U, et al. 267
Kawamata K, → Arikawa K, et al. 161
Kirchner WH, → Michelsen A, et al. 633
Kolb G, → Scherer C 891
Konishi H, Foster RG, Follett BK: Evidence for a daily rhythmicity in the acute release of luteinizing hormone in response to electrical stimulation in the Japanese quail 315
Korall H, Martin H: Responses of bristle field sensilla in *Apis mellifica* to geomagnetic and astrophysical fields 1
Kotak VC, Page CH: Synaptic responses produced in lobster abdominal postural motor neurons by mechanical stimulation of the swimmeret 695
Kristan WB Jr, → Nusbaum MP, et al. 355
Kryger P, → Michelsen A, et al. 633
Kutsch W, → Stevenson PA 115
Labhart T, → Nilsson D-E, et al. 645
Lehmann A, → Zeise M 461
Lnenicka GA, → Pahapill PA, et al. 367
Loftus R, Corbière-Tichané G: Response of antennal cold receptors of the catopid beetles, *Speophyes lucidulus* Delar. and *Choleva angustata* Fab. to very slowly changing temperature 399
Mackintosh RM, Bilotta J, Abramov I: Contributions of short-wavelength cones to goldfish ganglion cells 85
Martin H, → Korall H 1
McMahon DG, Block GD: The *Bulla* ocular circadian pacemaker. I. Pacemaker neuron membrane potential controls phase through a calcium-dependent mechanism 335
McMahon DG, Block GD: The *Bulla* ocular circadian pacemaker. II. Chronic changes in membrane potential lengthen free running period 347
Meyer E, → Nilsson D-E, et al. 645
Meyertholen EP, Stein PJ, Williams MA, Ostroy SE: Studies of the *Drosophila norpA* phototransduction mutant. II. Photoreceptor degeneration and rhodopsin maintenance 793
Michelsen A, Towne WF, Kirchner WH, Kryger P: The acoustic near field of a dancing honeybee 633
Miller L, → Schnitzler H-U, et al. 267
Mills A, Zakon HH: Coordination of EOD

frequency and pulse duration in a weakly electric wave fish: the influence of androgens 417
Mudry KM, Capranica RR: Correlation between auditory thalamic area evoked responses and species-specific call characteristics. II. *Hyla cinerea* (Anura: Hylidae) 407
Müller CM: Differential effects of acetylcholine in the chicken auditory neostriatum and hyperstriatum ventrale – studies in vivo and in vitro 857
Mustaparta H, → Tømmerås BÅ 705
Nagahama T, Takata M: Food-induced firing patterns in motoneurons innervating the pharynx of *Aplysia kurodai* 799
Nilsson D-E, Labhart T, Meyer E: Photoreceptor design and optical properties affecting polarization sensitivity in ants and crickets 645
Nusbaum MP, Friesen WO, Kristan WB Jr, Pearce RA: Neural mechanisms generating the leech swimming rhythm: Swim-initiator neurons excite the network of swim oscillator neurons 355
Ofarim M, → Dudai Y, et al. 739
O'Neill WE, → Gooler DM 283
Osorio D: The temporal properties of nonlinear, transient cells in the locust medulla 431
Osorio D: Temporal and spectral properties of sustaining cells in the medulla of the locust 441
Ostroy SE, → Meyertholen EP, et al. 793
Ostroy SE, → Wilson MJ 785
Page CH, → Kotak VC 695
Pahapill PA, Lnenicka GA, Atwood HL: Long-term facilitation and low-frequency depression in a crayfish phasic motor axon 367
Paul DH, → Wilson LJ 881
Pearce RA, → Nusbaum MP, et al. 355
Pearson KG, → Wolf H 103
Peschke K, Eisner T: Defensive secretion of the tenebrionid beetle, *Blaps mucronata*: Physical and chemical determinants of effectiveness 377
Pickhard A, → Cheng K, et al. 469
Pollack GS, → Atkins G 681
Prange HD, → Gaunt AS, et al. 43
Reichardt W: Evaluation of optical motion information by movement detectors 533
Reimer K: Coding of sinusoidally amplitude modulated acoustic stimuli in the inferior colliculus of the rufous horseshoe bat, *Rhinolophus rouxi* 305
Resler C, → Wilczynski W, et al. 659
Rind FC: Non-directional, movement sensitive neurones of the locust optic lobe 477
Römer H: Representation of auditory distance within a central neuropil of the bushcricket *Mygalopsis marki* 33
Rübsamen R: Ontogenesis of the echolocation system in the rufous horseshoe bat *Rhinolophus rouxi* (Audition and vocalization in early postnatal development) 899
Rübsamen R, → Bigalke-Kunz B, et al. 255
Ryan MJ, Tuttle MD: The role of prey-generated sounds, vision, and echolocation in prey localization by the African bat *Cardioderma cor* (Megadermatidae) 59
Sattelle DB, → Blagburn JM 215
Scheich H: Neural correlates of auditory filial imprinting 605
Scherer C, Kolb G: The influence of color stimuli on visually controlled behavior in *Aglais urticae* L. and *Pararge aegeria* L. (Lepidoptera) 891
Schlecht P, Juse A, Höglund G, Hamdorf K: Photoreconvertible fluorophore systems in rhabdomeres, Semper cells and corneal lenses in the compound eye of the blowfly 227
Schnitzler H-U, Kalko E, Miller L, Surlykke A: The echolocation and hunting behavior of the bat, *Pipistrellus kuhli* 267
Sinsch U: Orientation behaviour of toads (*Bufo bufo*) displaced from the breeding site 715
Stein PJ, → Meyertholen EP, et al. 793
Stevenson PA, Kutsch W: a reconsideration of the central pattern generator concept for locust flight 115
Surlykke A, → Schnitzler H-U, et al. 267
Suzuki T, → Arikawa K, et al. 161
Szymczak JT: Daily distribution of sleep states in the rook *Corvus frugilegus* 321
Takata M, → Nagahama T 799
Tameyasu T: The mechanism of the burst formation in the cardiac ganglion of the lobster (*Panulirus japonicus*): a re-examination 389
Tømmerås BÅ, Mustaparta H: Chemoreception of host volatiles in the bark beetle *Ips typographus* 705
Tobler I, Jaggi K: Sleep and EEG spectra in the Syrian hamster (*Mesocricetus auratus*) under baseline conditions and following sleep deprivation 449
Towne WF, → Michelsen A, et al. 633
Tsai HJ, Ewert J-P: Edge preference of retinal and tectal neurons in common toads (*Bufo bufo*) in response to worm-like moving stripes: the question of behaviorally relevant 'position indicators' 295
Tuttle MD, → Ryan MJ 59
Vaněček J, → Illnerová H 495
Waldrop B, Christensen TA, Hildebrand JG: GABA-mediated synaptic inhibition of projection neurons in the antennal lobes of the sphinx moth, *Manduca sexta* 23
Wang-Bennett LT, Glantz RM: The functional organization of the crayfish lamina ganglionaris. I. Nonspiking monopolar cells 131
Wang-Bennett LT, Glantz RM: The functional organization of the crayfish lamina ganglionaris. II. Large-field spiking and nonspiking cells 147
Wasser JS, → Gaunt AS, et al. 43
Wehner R: 'Matched filters'–neural models of the external world 511
Wehner R, → Cheng K, et al. 469
Wilczynski W, Resler C, Capranica RR: Tympanic and extratympanic sound transmission in the leopard frog 659
Williams MA, → Meyertholen EP, et al. 793
Wilson LJ, Paul DH: Tailflipping of *Munida quadrispina* (Galatheidae): conservation of behavior and underlying musculature with loss of anterior contralateral flexor motoneurons and motor giant 881
Wilson MJ, Ostroy SE: Studies of the *Drosophila norpA* phototransduction mutant. I. Electrophysiological changes and the offsetting effect of light 785
Wolf H, Pearson KG: Flight motor patterns recorded in surgically isolated sections of the ventral nerve cord of *Locusta migratoria* 103
Zakon HH, → Mills A 417
Zeise M, Lehmann A: Phosphoethanolamine transiently enhances excitability of rat hippocampal neurons in vitro 461
Zoran MJ, Drewes CD: Rapid escape reflexes in aquatic oligochaetes: variations in design and function of evolutionarily conserved giant fiber systems 729

Indexed in *Current Contents*